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ANALYSIS OF FIVE THOUSAND CASES OF SKIN DISEASE.¹

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FOURTH PAPER.

Acne. — As already stated, it is mostly in connection with the affections of the sebaceous glands that the most notable difference between private and dispensary practice is observed. Regarding acne as one of their advanced stages, a comparison of its occurrence in the two classes of patients confirms the data there given. In the five thousand hospital cases it was observed three hundred and forty-eight times, whereas among the two thousand tabulated from my private case-book it occurs three hundred and sixty times. The cases comprise acne disseminata, acne rosacea, and non-parasitic sycosis, and present little of special interest. The accompanying table shows the distribution of the cases of simple acne according to sex and age.

Ages.	Males.	Females.	Total.
Between 10 and 15.....	—	10	10
" 15 " 20.....	32	94	126
" 20 " 25.....	30	59	89
" 25 " 30.....	11	14	25
" 30 " 35.....	10	13	23
" 35 " 40.....	3	8	11
" 40 " 45.....	4	12	16
" 45 " 50.....	3	8	11
" 50 " 60.....	7	2	9
" 60 " 70.....	1	1	2
	101	221	322

It will be seen that by far the larger part of the patients were between the ages of fifteen and twenty-five, and this proportion would be much larger if all the cases which began during this period were added to it, the ages given being those at which the patients presented themselves for treatment. In many it had already existed for years. The

¹ Continued from page 332.

youngest of them was thirteen years old. The apparent difference in frequency of occurrence between the sexes must not be regarded as an actual representation in this respect, because girls care so much more for their "complexion," and seek medical relief accordingly. Nothing was learned by inquiry or observation in the whole series of cases which would satisfactorily explain the occurrence of acne. It was associated with disturbances of the digestive and sexual systems in a small proportion of cases, but just these disturbances are among the most common ills of the period of life in which acne most frequently occurs, and yet are only exceptionally accompanied by the latter. That the cutaneous affection is often aggravated by such internal disorders is, without doubt, true.

The few cases of impetigo (nineteen) and ecthyma (fifty-five) here recorded need but a word of explanation. The names do not necessarily signify distinct individuality of the affections included under them, but certain conditions of the skin due to a variety of causes, and closely allied to, or merely advanced stages of, eczematous inflammation. The distinction between them is largely one of degree; impetigo meaning the occurrence of small, discrete pustules without other accompanying forms of efflorescence, and not in the course of other cutaneous diseases, and ecthyma comprising the larger and deeper seated forms of efflorescence, such as occur in connection with, or as sequelæ of several affections of the skin accompanied by irritation, and in persons whose general condition is below the healthy standard. Groups of cases presented themselves in several instances which might, perhaps, be called impetigo contagiosa, if we were prepared to admit the existence of such an independent affection. They were remarkable, however, chiefly for occurring simultaneously in members of one family or of contiguous households, but individually were not strikingly peculiar. Similar cases at least, if occurring singly, would not attract especial attention. No element or certainty of contagion was discovered in connection with them.

Class V. *Hæmorrhages* (19 cases). The affections comprised under this class were cases of simple purpura. They were of a mild type, affected mostly the legs, and were rarely associated with apparent disturbance of the general economy; indeed, the presence of the attack was in several instances discovered only by accident. A feeling of slight weakness in the legs was the most prominent accompanying symptom. Several of the cases were chronic in course, outbreaks of the hæmorrhagic spots following each other either continuously or interruptedly for weeks and months. Unfortunately, they yielded no insight into the causes of this mysterious disease.

Class VI. *Hypertrophies* (40 cases). The hypertrophies of the cutaneous tissues are divided by Hebra into three groups, characterized

as follows: 1st, increase of pigment; 2d, thickening of the epidermal or horny layer with or without accompanying changes in the papillæ, called keratoses; and 3d, hypertrophies of the connective tissue. In Table II. the separation of the last two is not properly indicated, scleroderma and elephantiasis arabum belonging to the third group. The cases of pigment change included in the list, eighteen in number, were trivial in character, and consisted of an abnormal increase in amount of the colored cells of the rete distributed either in the form of small spots, lentigines; larger patches upon the face, chloasma (moth); or more extensive and more generally distributed stains upon the skin, melasma or negrities.

Among the keratoses, or affections of the epidermal structures of the integument and its appendages, the most interesting cases were five of ichthyosis and one of cornu cutaneum. Of the former, four were girls between the ages of four and nineteen; the other was a man, aged twenty-six. All had had the affection from earliest childhood. It was of a mild type, ichthyosis simplex, and of general distribution. In one of the cases only was there an approach to the form called ichthyosis hystrix, and in this only of partial distribution. All but one were in good general health.

Cornu cutaneum penis. — The case of cornu was a remarkable one, and deserves especial mention. The subject was a gentleman thirty-six years old, who at the age of twenty-two was circumcised for congenital phimosis. The surface of the glans and sulcus coronalis remained ever afterwards very sensitive, and there was an undue amount of seborrhæal secretion from the parts. In 1870 this secretion became still more excessive, and the parts gradually assumed the condition he presented at his first visit, in October, 1874. At that time the remnant of the foreskin, about a quarter of an inch in length, was converted into a thickened collar standing up perpendicularly to the body of the penis, and having a horny, cartilaginous feel. The exterior cuticular portion was red and scaly; its inner surface, the deep cavity of the sulcus, and the posterior half of the glans around their whole circumference, were uniformly covered with a thick, white, pasty coating. This material was soft in some parts like putty, in others, where exposed to the air, as hard as spermaceti, and could be dug out with a knife by the patient from behind the glans to a considerable depth without sensation. The only thing complained of by him was the inconvenience and annoyance of the affection. When pressed upon, "it hurt," he said, "just as any other foreign substance would in such a sensitive location." The formation of the material was stated to be quite rapid, "at the rate of one-hundredth of an inch in thickness per diem." From the parts exposed it sometimes cracked off when dry, but the material was everywhere kept down by the patient by frequent scraping with a knife. This

was the only treatment the disease had received. Some of the substance was examined by the microscope, and found to be composed of epithelial and sebaceous cells. Of the condition of the skin beneath the coating nothing could be learned, as it was completely concealed by it. The patient was directed to envelop the parts in a thick layer of diachylon ointment spread upon cloth by night, to apply sweet oil freely in the morning, then to wash them with soft soap, and to keep them covered by day with a cloth thickly spread with glycerin-plasma. A strong solution of tannin in glycerin was also to be painted on daily after the removal of the coating. . . . After a fortnight's treatment the patient wrote: "The results are very satisfactory so far. The ointment softens the layer, and the oil and soap aid the process so that after their use I can remove with my knife thin layers from the surface of the secretion by simple scraping, without cutting and without injury to the part, and I have thus removed more than nine tenths of it. On the removal of this dense, gristly mass the foreskin, which you saw curled up, and which could not be straightened, has now resumed its original form, flattening out into its natural shape. The whole layer is now so thin that it is no longer white, but flesh-color, from the color of the subjacent skin. The tannic acid now penetrates and causes in some places a certain amount of redness and congestion underneath. I am confident that the daily amount of secretion is much less."

I heard nothing further from the case for seven months, when the patient wrote that he had used the treatment four months and then had left it off to see what had been accomplished. The result, as stated, was that in a month the parts were again covered as thickly as before, and that they had also become quite sensitive and at times painful. The matter had collected to one fourth of an inch in thickness in some parts, and when removed was found to grow from closely-matted, fringe-like projections rising from the surface of the skin. In other parts the base was described as resembling a seed-wart. Where the disease bordered upon the true skin at the edge of the prepuce the growth was said to be as "hard as horn."

Six months afterwards, when he came for further advice, a great change was found to have taken place in the affection; from its seat, as above described, had grown up a remarkable horn. Its base occupied the inner surface of the remnant of the foreskin, the sulcus coronalis, and the adjacent half of the glans, narrowing in width gradually on the under side of the organ, and failing to meet and complete the ring only by the breadth of the frænum, which remained unaffected. In its widest portion for two thirds of its circumference the base measured three fourths of an inch. It had a uniform height of about half an inch, but in its central portion, corresponding to the median line of the dorsum penis, the growth presented a marked prominence or peak

more than three fourths of an inch in height. Its greatest diameter laterally was an inch and a half, while from the dorsum to the frænum it measured an inch and an eighth. Viewed from above it resembled the vertebral axis in shape more than any other familiar object of comparison, the central opening occupied by the free surface of the glans corresponding to the cavity for the spinal cord. Its perpendicular surface was marked by parallel upright striæ and ridges, resembling coarse nail-tissue, while its broad, plane tip offered a transverse section view of its lamellar or fibrous structure. Its color was yellowish-white. The exterior surface was very firm and horn-like, but the central portions were comparatively soft and waxy in consistence.

Excision of the horn was advised, and the operation was performed by Prof. H. J. Bigelow. The growth was dissected away entire with the scalpel and scissors, and the mucous membranes of the foreskin and glans were brought together by sutures, as in the operation for phymosis. Some little hæmorrhage followed, and the wound healed well. Examined by the microscope after removal, the outer surface was seen to be composed of epithelial cells compressed into compact fibrillæ or longitudinal bundles, which on cross section appeared to be arranged somewhat concentrically. The cells which made up the inner portion were far less compactly or systematically arranged, and numerous small, empty interspaces were visible between them. At the junction of its periphery with the skin, the epithelial cells of the horn were seen to be continuous with those of the mucous layer of the epidermis, and the papillæ were found to be greatly elongated and running up into the growth. No examination of the dermal tissues underlying the central portions, the sulcus, was made, so that the relations of the growth to the sebaceous glands of the part were undetermined. There would seem to be little doubt, however, as to the mode of development in this case. In consequence of the congenital phymosis the glands of the head of the penis had been stimulated into overactivity, and the retention of this secretion beneath the prepuce had caused an inflammatory action of its inner surface and of the opposing glans. After circumcision the parts remained still very sensitive and the secretion excessive. It is very probable that even then there may have been some papillomatous growth from the sulcus, as is so frequently the case after balanoposthitis from any cause, but at the time of his first visit nothing could be learned as to the condition of the tissues below the thick epidermal coating. At least after the subsequent removal of the latter by the means suggested at that time a closely-matted, fringe-like outgrowth was seen by the patient, which was undoubtedly hypertrophied papillæ. The rapid course from this period and the horny transformation of the cell-growth have been sufficiently explained above. We have here, then, all the elements essential to the formation of horns in accordance with the

theory of their development either from disorders of the sebaceous glands or from hypertrophied papillæ, the cells of the rete, of which they are composed, being deflected downwards to line the former or upwards to cover the latter. In the last semi-annual report on dermatology¹ will be found an account of a case very closely resembling this, by Professor Pick, of Prag, who gives two colored plates of the growth, which would serve equally well for ours, had the latter been allowed to grow a little longer. The history of the two horns, moreover, was very similar. Both affected individuals were below middle life, both had undergone circumcision for phymosis, and in both the growth was of very rapid formation. Dr. Pick in his article refers to ten other cases of horns upon the glans and foreskin. This one will make the twelfth, therefore, of this rare affection.

Under hypertrophy of the connective tissue there are placed four cases of scleroderma and five of elephantiasis arabum, diseases closely allied in their anatomical structures, but little similar in their ætiological relations. Of the former, three of the cases have already been reported at length;² the other may be briefly described here. The patient was an Irishman, fifty-one years old. In August, 1874, he was under treatment at the skin department for chronic papular eczema of the limbs, the legs being the parts principally affected, which disappeared in a few weeks. In October, 1875, he came again, stating that his hands had been getting hard for a year. The integument of the whole hands was found to be very firm, and the fingers were of a stony hardness, semiflexed, and immovable in their farther joints. The hands looked dried up and horn-like. The pigment and glandular structures were apparently unaffected. Elsewhere upon the body the integument was then in a normal condition, and the general health was unaffected. The local sclerosis was probably in no way connected with the more general eczema which preceded it.

Three of the cases of elephantiasis arabum, or pachydermia, deserve some notice. The first is especially interesting as an illustration of that variety which is associated with and apparently caused directly by periodical attacks of erysipelalous inflammation of the cutaneous tissues and the ensuing œdema. The patient was a girl, aged twenty-three, who for nine years had had recurrent erysipelalous inflammation of the right hand and fore-arm at irregular intervals of few or many months. The acute stage was generally of short duration and accompanied by nausea, headache, and fever. Desquamation followed, and the parts were left swollen for a considerable time, the duration of the œdema increasing with each such successive attack. When seen, the integ-

¹ The JOURNAL, December 9, 1875, from Vierteljahresschrift für Dermatologie und Syphilis, 1875, page 315.

² Archives of Dermatology, New York, July, 1875.

ument of the right hand and lower fore-arm was moderately thickened and firm, but presented no unusual surface-changes. No cause for the frequent attacks of dermatitis could be discovered. The second case was an Irishwoman fifty-six years old. For six years her right leg had been gradually enlarging from the knee downwards, without apparent cause or any positive symptoms, local or general. For a year before her visit the skin of the part had become eczematous, chiefly through scratching, and it was this symptom which brought her to the hospital for relief. The skin of the lower two thirds of the leg was greatly thickened, so that the part was about one half as large again as the corresponding portion of the other. Just above the ankle there was quite a deep sulcus. The eczematous condition, which so often accompanies the affection, was in the *rubrum* stage, and was secondary to the deeper tissue changes. The case deserves notice principally for the entire absence of previous inflammatory processes within or beneath the integument, or other of the usual exciting causes of the affection. The third case to be mentioned was an erect and stoutly-built American woman, five feet eleven inches in height. She was born in Vermont, and is forty-eight years old. In early life she had some "humor," and afterwards "salt rheum" until puberty, at the age of sixteen, when it disappeared. Twenty-five years ago, when twenty-three years old, she sprained her left ankle, and dates her trouble back to that event. The part never became quite strong again, and some months afterwards it began to be red and swollen, and itched greatly. It was much scratched, but there was no breaking of the skin or ulceration, although the veins became varicose from the knee downwards. From this period the leg constantly increased in size, although very gradually, the surface-changes in the skin never wholly disappearing.

At twenty-six she was married, and has given birth to three healthy children. She never had milk-leg or other puerperal process. Nineteen years ago she could wear, by stretching, an ordinary stocking, but four years afterwards she was obliged to have a special last made for her foot. Its greatest increase in size, fully one half, has been gained during the past ten years. Sixteen years ago she for the first time had a chill, followed by feverish reaction, but without any especial local symptoms. Since then these attacks have been numerous, several each year, accompanied or preceded by pain extending from the sole of the affected extremity to the hip. Red streaks are seen running up the leg, but there is no pain produced by deep pressure or impeded motion in the limb at such times. Nausea has been a constant accompaniment of the attacks, which last about forty-eight hours. There have been three so-called abscesses in different parts of the leg below the knee, discharging, when opened, one half a cup of clear, colorless, thin fluid, and continuing to run for some time afterwards (*lymphorrhœa*). At other times a similar

fluid has oozed from the deep fissures in parts of the skin. She never feels so well generally when the parts are leaking in this way. Seven years ago a chronic ulcerative process of the skin began on the right wrist and left elbow, which lasted many months, and left scrofulous-looking scars and some still prominent and red tubercles there.

When first seen, four years ago, her condition was recorded as follows: Patient manages this enormous limb with comparative ease and little suffering. She is able to walk quite long distances, and does her general housework with little fatigue. The catamenia have not yet ceased, and her general health is good enough.

The left thigh just above the knee-joint is somewhat fuller than the corresponding portion of the right, but the patella is easily felt. Below the knee the limb bulges abruptly to an immense mass, and continues of about the same size nearly down to the ankle. The foot is also much enlarged, and the skin covering the dorsal surface of the toes is very thick. Half-way down the calf the mass is divided by a very deep sulcus. To the feel it is brawny and resisting, not pitting easily on pressure. The surface of the skin covering the upper portion of the leg is coarse in texture, the hair follicles being widely separated, and largely occupied by eczematous fissures. Over the lower third and upon the dorsum of the foot the skin is largely covered by thick collections of discolored epidermal scales, separated in parts by deep fissures or sulci. In a few places the elongated papillæ, capped by brown epidermal tips, stand out individually or in slender groups, forming a sort of shag. All parts of the leg are at times affected by eczema, and itch extremely.

The dimensions of the two legs are —

	Left.	Right.
Three inches above patella.....	22 inches.	22 inches.
Around patella.....	22 "	19 "
Middle of calf.....	29 "	17 "
Below sulcus.....	28½ "	
Just above ankle.....	20½ "	12 "
Between folds at ankle.....	16½ "	
Over dorsum of foot.....	14 "	9 "

The patient weighs two hundred and twenty-five pounds.

Since 1872 there has been but little change in her condition. The leg certainly has not gained in size, and the eczema has been kept under by the applications used. There have been no fresh attacks of inflammation of the lymphatics or discharge of lymph from the part. The patient weighs at the present time two hundred and fifty pounds.

Class VII. *Atrophies* (37 cases). The instances of atrophy, although mostly of the rarer forms of cutaneous disease, were not of themselves remarkable. The case of leucoderma was simple and partial, the skin of the parts affected being unchanged, except in the loss of the pigment-cells. The maculæ atrophicæ occurred in a man to a very marked degree, being seated upon the thighs and hips. They were of an

elongated, oval form mostly, and of a glistening, bluish-white color. No cause of their formation was apparent. Of the cases of atrophy of the hair, so called, eleven were due to preceding seborrhœa of the scalp, alopecia furfuracea, the most common form of baldness. The others, nineteen, were cases of alopecia areata, and are placed in this class in conformity with Hebra's arrangement. It is not my intention to discuss here the vexed question of the pathology of this affection; but that it is of a mixed character, or, in other words, that there are specific clinical differences in the cases, and that a parasitic element may be observed in some and not in others, are conclusions I have drawn from both hospital and private practice. Several of the cases were of many years' duration, and in these the scalp, eyebrows, and eyelids were almost wholly denuded of hair. In five instances some other member of the family was affected in the same way.

Class VIII. *Benign New Growths* (82 cases).¹ The eleven cases of keloid varied in extent from the single outgrowth of the size of a pea upon some to several elevated patches as large as the hand upon others. It is difficult in some cases to discriminate between true spontaneous keloid and the false or hypertrophied scars. In some instances I think there can be no doubt that unmistakable cases of the former have their origin in minute scar formations, perhaps the inconspicuous seats of former acne pustules. With one case of pronounced keloid atrophy of pigment in the surrounding skin was associated, of the same form as in Wilson's morphea. Two of the most extensive cases were in negroes. One of the two cases of molluscum fibrosum was that described by Dr. Wigglesworth in the April number of the *Archives of Dermatology and Syphilis*; the other was of a trivial character.

Lupus vulgaris occurred but eleven times. This appears to be a remarkably small percentage, but true lupus in my experience is a very rare disease in New England compared with its prevalence in Europe. The name as here used does not of course mean that heterogeneous mixture of affections which makes up the lupus of many surgical works and hospital reports, and which includes nearly every form of chronic ulcerative and crusting disease upon the face. Lupus erythematosus was relatively more common. The twenty-seven cases of so-called scrofuloderma represent a great variety of processes affecting the cutaneous tissues of persons exhibiting signs of that general condition recognized as scrofulous or strumous. This group may be regarded as a convenient temporary receptacle for a class of affections which cannot well be placed elsewhere, but which closer analysis will no doubt enable us to distribute more appropriately in the future.

(To be concluded.)

¹ The number of cases included in this class is wrongly given in Table II., the affections enumerated in the first line of the text under Class XI. (lupus and scrofuloderma) belonging here.

A CASE OF LARGE AMOUNT OF LIQUOR AMNII.

BY JOHN H. GOODELL, M. D., OF MARSEILLES, ILL.

I WAS called, February 26th, at six P. M., to Mrs. M., five months advanced in her ninth pregnancy. She was a thin, spare woman, about thirty-five years of age. She had never had any trouble with her previous gestations, but since her last conception she had been ailing all the time. In January last she had been quite sick, and unable to be about the house since then. Half an hour before my arrival, while she was sitting by the window, she felt something give away and immediately fainted. She was carried into an adjoining room to her bed, leaving a large pool of water where she had fallen. She was conscious when I came. She told me that she was larger before the accident than she had ever been at term. I found her weak, pulse 100, small. The bed upon which she was lying was completely saturated with water, dripping also from some dependent under part into a vessel which was one third full. The floor was nearly covered with water. The uterus seemed as large as it would have been at four months, and contracted fairly upon its contents. Digital examination revealed a foetus at the ostium vaginae, and I found the head of another just outside the os uteri. By careful manipulation the second one was delivered without very much hæmorrhage. During the time occupied in delivery the patient had fainted so many times that I began giving her brandy, in a measure relieving her. I made several fruitless attempts to get away the placenta. She seemed to fail so rapidly that I sent for Dr. J. Montgomery. We determined to continue the brandy and ergot, of which I had already given two doses, and, as her residence was in a locality predisposed to septic influences, we thought the placenta should come away. It was accordingly removed with very little loss of blood. Frictions of mustard to the extremities had been kept up for some time, but to no purpose. Ears of corn, dropped into boiling water for a few moments, and rolled in cloths, were then placed between her legs and up the sides of the body as far as the axillæ. The uterus contracted well under the stimulus of the ergot, but the pulse continued small, despite the artificial heat. She was evidently sinking, so I gave brandy subcutaneously, putting most of it under the skin of the body. Our efforts were fruitless. She died at 9.45 P. M., about four hours from the time she fainted at the window. I questioned her husband and daughter with regard to any accident or fall or anything of the kind that might throw light upon the case, but they said there was nothing of that description that they could remember during the pregnancy, to which the unfortunate termination could be attributed. The amniotic fluid was estimated at six quarts. My impressions are that that is a low estimate; the hæmorrhage was not over twelve ounces. My

views of the case are as follows: The double foetus required twice the ordinary amount of exertion of the uterus, which weakened it. When the foetal development went beyond the point of uterine tolerance, the membranes broke, the shock and comparatively slight hæmorrhage proving fatal.

CASE OF ACUTE RHEUMATISM TREATED WITH SALICYLIC ACID.

BY IRVING W. SMITH, M. D., CHARLES CITY, IOWA.

JANUARY 20th, Gertie C., a delicate child of eleven years, first noticed slight pain and swelling of one ankle, which increased so as to confine her to bed on the following day.

February 2d. On this day she was first seen by the physician. Several joints were now affected, the back was painful, and any motion unbearable. Erythema nodosum appeared on the arms and legs. The patient was put upon the ordinary alkaline treatment, with Dover's powder to relieve pain at night, and at the end of a week was so much improved that medical attendance was discontinued.

February 29th. The physician was again called. For the last three or four days and nights she had suffered constantly from severe pain, crying out continually. She was now ordered salicylic acid, five grains to be taken in a wafer every hour.

March 1st. Free from all pain. She became so in about twelve hours after beginning the remedy, having taken some forty grains. The acid was continued till seventy grains were taken, within something less than twenty-four hours. The effects observed were profuse perspiration, the head at one time a little "whirly," no appreciable disturbance of the stomach. The result seemed magical.

After about a week slight pains returned. Ten five-grain powders were administered, with the same gratifying result as before.

April 1st. There has been no further relapse; the girl is now in excellent health; her mother says she "never felt better in her life."

RECENT PROGRESS IN OPHTHALMOLOGY.

BY O. F. WADSWORTH, M. D.

Anatomy of the Lachrymal Canaliculi. — Heinlein¹ examined these canals on horizontal and frontal sections through children's heads after the lime had been removed from the bones by acids. He divides the canaliculus into five parts: punctum lachrymalis, vertical portion, curved portion, horizontal portion, and the conjoined canal with the opening into the sac. The punctum lachrymalis opens into a vertical

¹ Archiv für Ophthalmologie, xxi. 3.

portion of the canal which has the form of a funnel, its smaller end directed toward the punctum. This is the shortest portion of the canal, having a length of .5 mm. and a width at its widest part of .4 mm. From the base of this funnel the canal makes a curve for a short distance and then assumes a nearly horizontal course, being directed slightly upward in the lower, downward in the upper lid. Near the lachrymal sac the canaliculi unite and thus enter the sac. On the convex side of the curved portion of the canal are two shallow, wide-mouthed diverticula, the first, nearer the funnel, directed laterally, the second and larger directed downward in the lower, upward in the upper lid. The width of the canal is about doubled by the diverticula, and it is to their presence, Heinlein believes, that the appearance of spiral windings in Hyrtl's¹ corrosion-preparations of the canaliculi is due. He was unable to observe any trace of spirals, nor did the sections show any sign of valve-like folds of mucous membrane in the course of the canaliculi, as described by some authors. Whether such a valve exists at the entrance of the lachrymal sac seemed more doubtful. On all sections the mucous membrane of the sac showed folds projecting into its cavity, perhaps due to the influence of the means employed for hardening the preparations, but such folds were not confined to the neighborhood of the mouth of the canaliculus.

Heinlein denies the existence of such an arrangement of muscle-fibres about the canaliculus as to form a sphincter, even where Merkel² described them, just beneath the punctum. On the contrary, study of his sections inclines him strongly to the belief that muscular fibres are inserted into the wall of the canaliculus at that part in such a way as to dilate instead of contract its calibre.

Course of the Nerve-Fibres in the Chiasma. — At the last meeting of the Heidelberg Ophthalmological Society, Woinow³ showed a preparation which offered strong evidence in favor of only partial crossing of the optic nerves. It was from a woman who had lost the left eye at ten years of age, from variola, and died at fifty. The left optic nerve was atrophied, the right normal; both optic tracts were atrophied, the left to a much greater degree than the right. Woinow also stated that Adamük, on repetition of Gudden's⁴ experiments on dogs and cats, had obtained the same results, that is, after enucleation of one eye partial atrophy of both optic tracts.

In the discussion which followed Woinow's communication, Donders mentioned a similar preparation which had formerly been in his possession for a number of years. In a woman, dying at sixty, one eye had been atrophic from youth. There also the corresponding nerve was com-

¹ Corrosions Anatomie. Wien. 1873.

² Handbuch der Augenheilkunde (Graefe and Sarmisch), i. 1.

³ Monatsblätter für Augenheilkunde, page 424, 1875.

⁴ See Report on Ophthalmology, May, 1875, JOURNAL.

pletely atrophic, both tracts partially atrophied, that on the same side as the lost eye much more than the other.

Hirschberg¹ also related the case of a man who had right-sided hemiopia, the line of demarkation sharp and vertical, aphasia and right-sided hemiplegia. At the autopsy a tumor was found in the left side of the brain and a marked thinning of the left tractus. The theory of semi-decussation alone here explained the hemiopia.

Gudden² furnishes a second example of partial atrophy of both optic nerves in the dog, following atrophy, experimentally produced, of one optic tract. He further points out that, if there be total crossing of fibres in the chiasma, an antero-posterior section through its centre should give a surface about equal to that of transverse section of both tracts, while in fact it falls much short of this.

Tuberculosis of the Conjunctiva. — The occurrence of miliary tubercles in the choroid in connection with general, mostly acute miliary tuberculosis is frequent; in like connection tubercles have been found in the iris by Gradenigro, and in iris, ciliary body, and retina by Perls.³ Recent observations on local tuberculosis⁴ have shown that miliary tubercles may be formed in the eye, as in many other situations, without their presence elsewhere, or at least without an acute tuberculosis. To the cases of miliary tubercles in a granuloma of the iris and in a growth of the conjunctiva, reported by Koester,⁵ Walb⁶ adds a third. A boy, of tuberculous family, who had suffered from caries of the petrous bone followed by glandular enlargements of the neck, had, after measles, an inflammation of the right eye. Some weeks later, besides a chronic blenorrhœa of the conjunctiva of the lids, there was a growth of the upper equatorial part of the bulbar conjunctiva sufficient to displace the eye somewhat downward and inward. The anterior part of the growth was pale red, partly covered by epithelium, its surface slightly uneven. The posterior part was the seat of an ulcer with sharply-marked edges, its base formed by a yellowish-white crumbling mass. Here the sclera was destroyed, so that a probe passed easily into the interior of the eye. The lens was cataractous, but the cornea normal, and the anterior chamber of good depth. Soon after, a panophthalmitis gave rise to shrinking of the globe. Gradually flattening of the growth took place, the cheesy masses were thrown off from the ulcer and replaced by granulations, and small points of cheesy degeneration appeared in the rest of the tumor. A portion of the tumor was removed and its tissue found to be made up of small, round cells with numerous vessels, in the midst of which were scattered nodules having all the histological characteristics of miliary tubercles.

¹ Reported at length in Virchow's Archiv, Band 65.

² Archiv für Ophthalmologie, xxi. 3.

³ See Report on Ophthalmology, JOURNAL, November, 1873.

⁴ See Report on Pathology, JOURNAL, April, 1874.

⁵ Centralblatt, 1873.

⁶ Monatsblätter für Augenheilkunde, July, 1875.

Considering the great preponderance of granulation-tissue in the tumor, it is probable that first a chronic inflammatory hypertrophy occurred, followed by the development of tubercles and partial secondary cheesy degeneration.

As tuberculosis of the conjunctiva, Hock¹ also reports two cases, one of which, that of a child of two years, who soon died of meningitis, bears a strong resemblance to Walb's case. In the other case, that of a man with pulmonary phthisis, there was an irregular ulcer, with uneven edge and yellowish base, at the upper edge of the tarsus of the upper lid.

New Operation for Symblepharon. — At a meeting of the Clinical Society of London, Dr. Taylor² showed a patient on whom he has operated for symblepharon by a new method. After the adherent lid has been separated from the eyeball, a thin piece of skin is dissected up from the lid, and being passed through an opening in the tarsus, its raw surface is fixed in contact with the raw surface of the inner side of the lid or of the globe. Reunion of the lid and eyeball is thus prevented. The transplanted skin is at first nourished through its base, but this is divided so soon as the skin has become attached in its new position. Thus situated the skin is said to assume the functions of a mucous membrane.

Treatment of Separation of the Retina. — The want of success which has attended the treatment of separation of the retina by derivatives and local depletion, or by puncture of the membrane through the sclera, has led most oculists to abandon all special treatment or to keep the patient quiet on his back for some time. Samelsohn³ proposes, in addition to the latter expedient, the employment of a pressure-bandage on the affected eye. He holds that two factors are active in keeping the retina in position: the pressure of the intra-ocular contents and the elasticity of the sclera. So long as these are pretty well balanced the retina will remain in place, and an elastic sclera may even compensate for a rather sudden evacuation of a portion of the intra-ocular fluid. But when the sclera has lost its elasticity, sudden diminution of intra-ocular tension may cause separation. Loss of elasticity is due to tissue-changes, is gradual, progressive, and permanent; diminution of intra-ocular pressure appears to be often only a temporary condition. The indication, therefore, is to preserve the tension at the proper height artificially till the proper amount of intra-ocular fluid is resecreted. Pressure of the bandage is to make up for the want of elasticity in the sclera. Samelsohn has not found the objection that increased external pressure would tend still further to lessen the amount of fluid contents

¹ Monatsblätter für Augenheilkunde, September, 1875.

² British Medical Journal, February 5, 1876.

³ Centralblatt, 1875, page 833.

of the eye justified in practice. The bandage should be renewed twice daily and continued three or four weeks; earlier suspension of the treatment may be followed by the loss of any improvement already obtained. During the whole time the patient lies quietly on his back. There is no objection to careful testing of the function of the eye at the time of renewal of the bandage. The first sign of the effect of the treatment is episcleral congestion and ciliary neuralgia, accompanying which there is usually already improvement in amount of vision and size of field. Samelsohn asserts that he has found this method more successful than simple dorsal decubitus, and in the twelve cases in which he tried it obtained a good result in all fresh cases.

Blindness from Whooping-Cough.—Knapp¹ reports the case. A boy, three years old, had suffered from whooping-cough six weeks; was emaciated and excitable. For two days the parents had observed loss of sight, and he had complained of darkness, though his condition otherwise had not changed. Knapp found no abnormality externally, and the pupils responded to light, but the boy could not even tell the direction of the window. With the ophthalmoscope marked retinal ischæmia was observed, the nerve-disks were white, the veins scant and thin, in one eye only the main branches of the arteries to be seen as fine threads, in the other no arteries visible. As no change was evident after twenty-four hours of nutritious diet and stimulants, paracentesis of the anterior chamber was performed, in order to diminish the intra-ocular pressure, and so favor the entrance of blood to the eye. The next day the retinal vessels were better filled and the optic disks less white; the boy could also point out the window. The condition of the retina and disks improved gradually, and the patient became able to recognize objects about him, but vision never reached the normal standard. The general disease did not improve, however, and death ensued, six weeks later, from lobular pneumonia.

Blindness from whooping-cough is very rare. Knapp quotes Professor Loomis to the effect that it has been observed almost exclusively in children who have died from lobular pneumonia, and as this was also the result in the present case, the symptom would appear to be a very grave one. The question as to the causation of ischæmia retinæ generally is still undecided, and this case does not offer a solution. Knapp was inclined to refer the ischæmia to the general anæmia and weak action of the heart, or possibly to a hæmorrhagic effusion between the sheaths of the optic nerves. The latter supposition derives some support from the frequent occurrence of conjunctival hæmorrhages in whooping-cough. This frequency of conjunctival hæmorrhage would also lead us to infer intra-ocular hæmorrhages where disturbance of vision occurred, but in the case related nothing of the sort was observed. A point of interest

¹ Archives of Ophthalmology and Otology, iv. 3 and 4.

in the case is the good influence which seems to have been exerted by the paracentesis.

Myopia in Swiss Teachers. — Pflüger¹ made use of the opportunity afforded by the assemblage of five hundred and forty-six teachers, twenty to twenty-five years of age, at Lucerne, under the military laws of Switzerland, to investigate the refractive condition of their eyes. The results of his observations, though imperfect in some respects, are yet of considerable interest. He obtained data concerning five hundred and twenty-nine, partly by personal examination, partly from the records of the military commission intrusted with the examination of recruits. Most of the cantons were represented; three hundred and seventy-five were natives of German, one hundred and fifty-four of French Switzerland. At the first it was noticeable that a much larger proportion of the German (nine per cent.) than of the French (two per cent.) Swiss wore glasses, and examination of the refraction gave a similar but not so marked difference. Of the German Swiss 24.3 per cent., of the French Swiss 14.3 per cent., were myopic. It appeared also that the percentage of higher degrees of myopia was greater among the German than among the French Swiss myopes, but in both far the greater number had only a moderate degree of myopia. It is interesting that the average degree of myopia for the year of age (twenty to twenty-five) varied little, in four years was indeed the same (one twelfth), while the average for the men of the oldest year (twenty-five) was, contrary to what might have been expected, somewhat less (one fifteenth).

Pflüger propounds the question whether the different percentage of myopia among the German and French Swiss is due to peculiarity of race, to difference in length of study required, or to other cause. The second supposition is answered in the negative, inasmuch as the length of preparatory study required of the teachers was, generally, much the same. He thinks it of importance, however, that the candidates for positions as teachers in German Switzerland are for the most part educated in seminaries in which they live as well as receive instruction, while in French Switzerland they dwell in private houses. This corresponds also with the observations of Erismann, who found in the Russian schools ten per cent. more myopes among the internes than among the externes. Examination as to the hereditary character of the myopia was too imperfect to admit of definite expression of opinion, but many of the German Swiss myopes denied the existence of myopia in their families. Evidence of the necessity of care in selecting glasses is given by the fact that many of the men examined wore glasses stronger than their myopia required.

¹ Monatsblätter für Augenheilkunde, September, 1875.

ANIMAL PARASITES.¹

THE author of this work, well known as a helminthologist, seems to have endeavored to present all the possible phases of mutual relationship between animals of all ranks, from limited commensalism up to complete parasitism. In doing this he has brought together a vast number of such instances from all classes of the animal kingdom, which are curious at least, although of little importance to the general reader, but has failed, we think, to make just the kind of popular and yet scientific manual of the true parasites of man and the higher animals which is so much wanted, and which would have formed so valuable a contribution to this series of publications. The more distant relationships he discusses under the titles of free and fixed messmates, and mutualists, including associations as remote as those between the pilot fish and shark among the higher orders. Parasites he divides into those free during their whole life, as lice, fleas, bed-bugs, the itch-insect, etc.; those free while young, as the chigoe, ticks, and guinea-worm; those free when old, as ichneumons and æstri; those that migrate and undergo metamorphosis, the flat, encysted, and round worms of man for example; and lastly those which are parasites their whole life, of which no familiar instances can be cited.

Parasitism he shows to be almost universal, not only so far as individual hosts are concerned, but as to the organs and tissues affected; he is even inclined to believe it to be beneficial to the host, as the following extracts show: "The animal which possesses its ordinary parasites, far from being ill, is in a normal physiological condition. . . . The Abyssinians do not consider themselves in good health except when they nourish one or many tape-worms. . . . It is not a matter of doubt to us that parasites often play their allotted part in the economy; their absence as well as their presence may be the cause of inconvenience. We should not even be astonished if the administration of certain worms internally should be prescribed as a remedy. . . . No one can foresee all that science has a right to expect from the salutary effects of certain parasitical worms on the system. . . . Fleas may, perhaps, some day find a place in the chemist's shop as well as leeches. We see no reason why homœopathic bleedings should not be resorted to as well as homœopathic medicines; we should certainly have more confidence in the effects of the bites of fleas than in the efficacy of remedies subdivided into the millionth part of a grain." Such utilitarian views of the subject are certainly original. These statements may, perhaps, be regarded merely as examples of the exaggerated style of expression and fancy with which the book is filled, and which could well be spared. Surely it is out of keeping with the high objects of this series to search the literature of former centuries for fabulous tales which can only mislead the common reader. Michelet, in his imaginative works on natural history, and Victor Hugo, in his chapter on the devil-fish, have made us acquainted with a certain style of descriptive writing, but we had not expected to see it made use of in a "scientific" treatise on parasites.

¹ *Animal Parasites and Messmates.* By P. J. VAN BENEDEN, Professor at the University of Louvain, etc. The International Scientific Series. New York: D. Appleton & Co. 1876.

On the other hand, the author has brought together some valuable information in reference to the parasites of man and the higher animals which was not previously accessible to the general reader. The guinea-worm is announced as entering the human system inclosed in a little fresh-water crustacean found in drinking-water. The very complex metamorphoses of the trematode worms (flukes) is described at length; how complex the following paragraph will show: "We have before considered the embryo as mother and daughter coming into the world together; or the mother, daughter, and granddaughter are born together like twins; so that if the mother or the daughter meet with an accident during parturition, the granddaughter may be born before the mother and even before her grandmother."

The danger of feeding patients with minced raw beef, or its juices, is well exposed. "Scherlau, at Stettin, found *tænia medio-canellata* in seven children who had been fed, on account of anæmia, with raw beef." The following instructive note upon the development of the broad tape-worm appears. "A very curious circumstance is the actual rarity of the *bothriocephalus* among the inhabitants of the shores of the Lake of Geneva, though formerly it was very common there. This diminution, if we may not call it disappearance, is due to the change which has been made in the construction of water-closets, all of which formerly emptied themselves into the lake, so that the embryos were hatched in the water, and persons were infested by them through drinking it. At present the refuse of the towns is carefully collected for the purpose of manuring the land."

The illustrations, eighty-three in number, are clear and well drawn, and the volume, like its predecessors, makes a handsome appearance in all respects.

THE INSANE HOSPITAL AT DANVERS.¹

THE commissioners report progress and ask for more money. The original appropriation of \$650,000 and the second appropriation of \$250,000 have been nearly expended, and \$600,000 more are asked for. This excess of cost over estimate is attributed partly to a larger amount of grading than was anticipated, to unexpected difficulties in arranging for a water supply with the town of Danvers, and to the addition of accommodations for a larger number of patients than was at first proposed. The plan originally contemplated provision for four hundred patients; this number has been increased to five hundred, and by using the attics six hundred can be provided for.

The writer recognizes the plans as old acquaintances, having devoted a month eleven years ago, with the present supervising architect, to drafting the original plans for the new city hospital for the insane that was *not* to be. After many revisions the perfected plans of the city were essentially adopted by the state commissioners, the same architects were employed, and Dr. Walker, of the Boston Lunatic Hospital, engaged as medical supervisor. Instead of the new city hospital on a hill at Winthrop, we are to have the same hospital on a hill in Danvers, equally bleak and more inaccessible. The only gain to

¹ *Report of the Commission upon the Erection of the New Hospital for the Insane at Danvers.* 1876.

Boston by this change of policy is in the fact that the State will pay about fifty-five per cent. of the cost of construction. The city now has over four hundred patients, and by 1877 or 1878, when the hospital is done, will have fifty more. We shall then see a state hospital nearly full of patients for which the city will pay board, having no direct control of its management. The four hundred and fifty Boston patients and their friends must go to Danvers to accommodate the fifty or more from Essex County. The heavy grading and the pumping of water from the Ipswich River might have been saved if the State had taken a site near the Cochituate or Mystic sources of supply.

Although this change of base was disappointing to many who felt that Boston should continue to have an insane hospital of her own, and who labored earnestly and thanklessly to bring it about, it will lead to a great improvement on the present state of things. The new hospital will be as complete and perfect in construction and appointments as it is possible to make it. As to expense, we can only say that the proper care of the insane necessarily involves great expense. No other plan is more economical than the present hospital system. The encouragement to multiply or enlarge such cheap institutions as the asylum for chronic insane at Tewksbury is not great. Perhaps a building for this class might be built at less cost than the Danvers hospital; but it must be remembered that the more demented and helpless the class of patients the more perfect are the appliances for heating, ventilation, and cleanliness required. An exclusively cottage system would be very expensive on account of the increase of roofs and walls for the same number, the reduplication of all kinds of apparatus, and the provision for additional supervision. Detached buildings for convalescents could, however, be added at Danvers, when circumstances require it, at a moderate expense. When this and the new hospital at Worcester are completed the State will be well equipped with four first-class hospitals for the insane.

T. W. F.

A MANUAL OF MIDWIFERY.¹

THIS manual by Dr. Roberts, one of the physicians to St. Mary's Hospital, in London, seems admirably adapted to enable the reader, without much trouble, to obtain a superficial knowledge of obstetrics. We have already expressed our opinion of the danger to be feared from the temptation which is constantly offered to students by the publication of these so-called *rade mecums*. The author has done his work well, however, and the result is the production of a concise statement of the leading facts relating to obstetric practice, based upon the most recent theories which are now considered as reliable.

¹ *The Student's Guide to the Practice of Midwifery.* By D. LLOYD ROBERTS, M. D., M. R. C. P., Lond. Philadelphia: Lindsay and Blakiston. 1876.

MEDICAL TEXT-BOOKS.

ALTHOUGH medical literature of the present day has been marked by the great and increasing number of treatises on special subjects, the demand for comprehensive works on medicine and surgery in a condensed form seems by no means to diminish, if we may judge from the frequent appearance in new forms of our old friends, the medical text-books. The object of this kind of work is, we presume, to afford an effective and ready means to the student or general practitioner of acquiring a knowledge, it may be, of medicine, surgery, or obstetrics. No portion of any one of these various branches should be neglected, and each subject, although treated in as concise a form as possible, should keep pace with the advance of science. It is evident that the range of subjects, particularly in the department of medicine and surgery, must be an exceedingly wide one, covering a broader field than it is possible for one individual, even the most experienced, to become fully conversant with. The quality of different portions of such a work must, therefore, be of very varying degrees of excellence. The necessity for keeping each subject within bounds properly proportioned to the size of the volume must result in an absurdly inadequate treatment of many important subjects, so as to render them practically useless for the purposes of teaching.

It has been the fashion of late years to complain of the enormous increase of works on specialties, as they are called, and there is little doubt that this form of literary enterprise, in many instances, has been much overdone. The origin of this abuse can be traced largely to the work of those writers who have attempted to perpetuate a class of books which in a great measure fail to meet the demands of the time. Formerly, such treatises obtained an exceedingly wide circulation, and were to be found in the library of every practitioner and upon the desk of every student. It is a great temptation to write a book "which will sell well," and this species survives, not by virtue of its fitness, but from a quality which is supposed to adapt it to the wants of the greatest number of readers. It must be elementary enough for the student to understand, and sufficiently comprehensive to make it useful as a work of reference to the physician. The truth is, it fails to accomplish either of these purposes.

A great want of the day is books which are intended primarily for the use of students. This is particularly true of surgery. A text-book of general surgery modeled somewhat after the plan of Billroth's *Surgical Pathology* would, we think, fill an "aching void." The subject, a complicated one and at points exceedingly abstruse, should be treated as a narrative, the thread of which is never broken or lost sight of, leading the mind without undue effort on its part from one subject to another. Diagrams (and not poor portraits of complicated specimens) would serve to make clear points too difficult to be explained by the text alone. Too wide a range of subjects should be carefully avoided. Such a work would encourage the student to supplement his clinical studies by appropriate reading. The surgeon would then rely upon *systems* of surgery for reference, and "the books" would become less a by-word of reproach among practical men than they now are.

MEDICAL NOTES.

— It is with feelings of deep regret that we announce to our readers the death of the distinguished clinical teacher, Professor Traube, at Berlin, on the 11th of April, after a long and painful illness, in the fifty-ninth year of his age. The son of poor parents, Traube by his industry and zeal worked himself up to the highest rank in the profession. After studying in Breslau, Vienna, and Berlin, he graduated at the University of Berlin in 1840. Here in 1848 he became privatdocent, and in 1849, as Schönlein's assistant, he took charge of the newly created department for thoracic diseases, and in 1853 became director of the same.

As Traube was a Jew, it was not until long after he and his clinic had obtained a world-wide reputation that he was appointed professor in the university. In his death Germany loses one of her most able, industrious, and conscientious observers.

— As a convenient solvent for salicylic acid Dr. Painter recommends to the *Pacific Medical and Surgical Journal* the liquor ammoniæ acetatis. By it a solution is made which is not unpleasant to take, and the sweetish taste of the acid is quite perceptible. Dr. Painter suggests a formula containing two grains of the salicylic acid to the drachm of the liquor ammoniæ acetatis.

— *The Medical and Surgical Reporter*, of Philadelphia, has reached its one thousandth issue. It was originally started as the organ of the New Jersey State Medical Society, under the charge of Dr. Joseph Parrish. Dr. Butler was subsequently associated with him, and the journal was shortly afterwards changed from a quarterly into a weekly and removed to Philadelphia. Dr. Butler, in 1867, associated with himself the present editor, Dr. Brinton, under whose charge the journal remains at present.

— Our English exchanges give abstracts of a report recently made to the Obstetrical Society of London, by Jonathan Hutchinson, F. R. C. S., on certain causes of death in ewes, during and after parturition. The results of Mr. Hutchinson's investigations seemed to prove that the death of the fetus before delivery was of much more serious consequence in sheep than in the human subject, and also that it was far from infrequent. The lamb, after death, appeared to become a cause of metritis, there being but little tendency to its expulsion. If metritis occurred it was apt to run a rapid course, gangrene frequently ensuing, during which rupture of the walls often took place. Peritonitis and pyæmia not infrequently occurred in connection with metritis. Puerperal metritis and peritonitis, or the consequent pyæmia, seemed to be invariably accidental, and not the result of contagion. They occurred in animals treated in the open air, and yet ran a course almost precisely similar to the parallel maladies in the human subject. Ewes during lactation, in consequence of the use of cotton cake, — an improper article of food, — seemed liable to a sort of idiopathic tetanus, but no such unfavorable results followed its use in lambs, hoggets, and undelivered ewes. Young lambs were liable, independently of any known source of contamination, to the occurrence of purulent phlebitis of the umbilical vein, with the consequent phenomena of pyæmia, a fact which gave strong support to what Mr. Hutchinson believed to be the true hypothesis of all pyæmia, strictly so called.

— For prurigo senilis the treatment recommended by Dr. W. K. Bowling is given in the *Nashville Journal of Medicine and Surgery*, April, 1876. It consists in sponging the parts affected by prurigo, night and morning, with the best cider vinegar, and after the vinegar has dried, smearing the surface with citrine ointment.

The same authority has published a remedy for the tenesmus of dysentery. It is to place a drachm of water of ammonia in the chamber vessel just before the patient sits upon it.

BOSTON CITY HOSPITAL.

MEDICAL CLINIC.

[SERVICE OF DR. HALL CURTIS.]

Hepatic Enlargement, with Blood-Cyst. — B. D. B., thirty-six years old, salesman, New Jersey, entered January 21, 1876, with the following history. Two years ago he had intermittent fever, lasting about two weeks. Four months ago he was attacked with very severe pain at the epigastrium, accompanied with vomiting and obstinate constipation. He was sick seven days. A fortnight after, he was again attacked in a similar manner, and was treated in a New York hospital for acute dyspepsia. He has since had constant pain in the left hypochondrium, and in the epigastric and umbilical regions, but most marked in the hypochondrium. This pain is not severe, excepting three or four times during the twenty-four hours, when it is intense and lasts about one hour. It is also induced by eating or fatigue. Pain is occasionally noticed in the left shoulder. He has always been accustomed to the daily use of alcoholic drinks, at times to excess.

At present his frame is slight, but he is sufficiently well nourished. His face is sallow and thin. Tongue slightly coated, but moist. The action of the heart is sluggish, but otherwise normal. Pulse is weak and compressible. The capillary circulation is also sluggish. Pressure on the skin leaves an impression like "la raie blanche scarlatineuse." Splenic dullness is increased. Patient states that he has lost flesh. He complains of constipation and dysuria. Examination of urine: color high; reaction strongly acid; specific gravity 1030; slight sediment; no albumen; no sugar. Pulse 72. Respiration 20. Temperature 100.4°.

During the rest of the month his condition remained unchanged. His pain was relieved and sleep obtained by ten-grain doses of Dover's powder. The constipation, which was obstinate, was relieved by enemata of soap, oil, and water night and morning.

February 3d. He complains more of pain in the epigastrium and of restlessness at night, with debility.

R̄ Syrupi manganesi iodidi gtt. xx. every four hours.

February 6th. Still continues much the same.

R̄ Elixir bismuthi, pepsin, et strychniæ 3i. three times daily.

R̄ Potassii bromidi gr. x. at night.

February 7th. Pain is still most severe in left hypochondrium. He complains of cough, with breast-pain. The lungs are normal. The abdomen is rather full, resonant throughout, with the exception of the left hypochondrium, which is dull and exceedingly tender. The heart-sounds are distant and feeble, but not abnormal. Pulse 84 and small. Appetite poor. Hop fomentations to hypochondrium at night. Omit bromide of potassium, and give

℞ Pulv. camphoræ,
Ext. hyoscyami āā gr. i.

M. et ft. pil. No. 1. Pro re nata.

February 16th. Very restless at night; persistent pain in left hypochondrium. Omit hop fomentations.

℞ Emplast. belladonnæ 6 × 8 over painful region.

Omit Dover's powder.

℞ Chloral hydrat. gr. xv.
Syrupi ʒi. M.

To be given every hour for three hours at night.

February 20th. The whole abdomen is now full and tender. The left hypochondrium, which was full and dull, is now resonant. The right hypochondrium is full and dull on percussion, evidently due to the increased size of the liver, the lower edge of which can be felt and is slightly raised and perceptible to the eye. The whole region of dullness is very sensitive. Four leeches to be applied to anus.

℞ Pepsinæ sacchari gr. x. before meals.

February 22d. No relief. Belladonna plaster removed. Turpentine stupes to be frequently applied to abdomen. Omit syropi manganis iiodidi.

℞ Syropi ferri, sodæ calcis, et potassæ hypophosphitis ʒi. every four hours.

February 26th. Complains of a choking sensation, evidently caused by flatulency, especially troublesome at night. Subcutaneous injection of one sixth of a grain of morphine at five o'clock p. m., and continue chloral.

March 9th. The hepatic enlargement has rapidly advanced. The lower portion of the liver now extends one and one half inches below the costal arch, is readily felt to be smooth and regular. Continuous with it is a prominent tumor with rounded outline, which, passing down four and a half inches to the right of the median line, reaches two and a half inches below the umbilicus, then extending two inches to the left of the median line, slopes upward to the ensiform cartilage. The vertical hepatic dullness in the right axillary line measures six inches, in the mammary line six inches, and in the median line to lower edge of tumor eight and one half inches.

The tumor is smooth and tense, with an indistinct sensation of fluctuation, not apparently adherent to the abdominal wall, but very sensitive to pressure, especially to the left of the umbilicus. The rest of abdomen and the lumbar region are resonant. There is no ascites, no œdema, no enlargement of abdominal veins or lymphatic glands. The conjunctivæ show a yellowish tint, but the skin is not jaundiced.

At present there is no cough, no dyspnoea. The lungs and heart are normal. The spleen is somewhat enlarged vertically. He has not had rigor, nor is there any history of dysentery, or known cause of tropical hepatic abscess.

There is no pulsation in the mass, no neuralgic pain, and no marked sign of constitutional trouble.

The diagnosis of a cyst, probably of the liver, was made, and a puncture at its most prominent point, one inch above and to the left of the umbilicus, made with the aspirator. Ninety-two ounces of a chocolate-colored, freely-flowing fluid was obtained. Towards the close of the aspiration the patient complained of pain referred to the end of canula, while at the same time the opposite wall of the cyst could be felt drawn against it. The withdrawal of the fluid was followed by a complete effacement of the tumor and entire flaccidity of abdomen.

The puncture was covered with adhesive plaster. The patient was directed to keep on his back, and no food or drink to be taken till evening.

Half-past five p. m. Has been very comfortable; quite free from pain, without nausea or vomiting. Pulse 68. Temperature 98.8°. Respiration 20. May have milk during the night, in small amount at a time.

Dr. E. G. Cutler very kindly made an examination of the fluid, with the following result:—

Reaction neutral to test-paper. No perceptible distinctive odor. Specific gravity 1012. No bile pigment discovered. Albumen present, at least thirty per cent. in amount. No urea detected. An amorphous residue on slow evaporation. Under the microscope red blood-corpuscles, many of them crenate, in large numbers, forming half the bulk of the fluid. Granule corpuscles in all stages of degeneration, in size varying from that of a red corpuscle to three times its size; some of these corpuscles were pigmented, containing it in little crystals (form not determined; they resembled those of blood, however). Certain masses of pigment very dark, alone, varying from size of blood corpuscle to larger; relatively few bacteria. Extraneous matter. The average of ten careful countings of these red and granule corpuscles in a field of known size in an undiluted state gave for the red 69.8, for the granule cells .2. That is, the proportion was as one to three hundred and forty-nine. The average, in health, of the ratio of the white corpuscle to the red in ordinary blood is one to five hundred or seven hundred. Here I take it the granule cells represent the white corpuscles having fattily degenerated, and (as seen) in some instances having taken up the red corpuscles in their interior, which subsequently degenerate. The inference, therefore, is that an exudation or extravasation of blood has taken place into a cavity, and the time elapsed *since* this has allowed a change to take place in the fluid. There were no crystals other than the pigment, and no free fat or cells other than those mentioned. That the coloring matter was due to blood chiefly was shown by chemical tests.

March 10th. Has had a very comfortable night, without vomiting. There is slight tenderness in abdomen, which is somewhat distended. A. M. Pulse 80. Temperature 98.8°. Respiration 20. Omit all medicine.

March 14th. A. M. Pulse 72. Temperature 98°. Respiration 24. P. M. Pulse 88. Temperature 98.8°. Respiration 28. Last night was troubled with pain, most marked in left hypochondrium, but spreading all over abdomen, and increased by full breathing. The abdomen is everywhere tympanitic, ex-

cepting the line of liver dullness, which passes one inch below the right costal arch. There is no vomiting. The pain seems to be caused by flatulency.

R̄ Pulv. camphoræ,

Pulv. capsici,

Pulv. zingiberis

āā gr. vj.

M. ft. pil. No. 6. One three times daily.

March 20th. Has improved during the past week. Temperature has remained normal. To-day went down town to attend to business of some importance.

March 25th. A. M. Pulse 86. Temperature 98.4°. P. M. Pulse 70. Temperature 98°. For three days the pain has been growing worse, with slight vomiting last night. Abdomen everywhere very tympanitic, but not very tender. Omit pills of ginger and capsicum. Carbo. ligni 3i. every four hours, to be given in French wafer, thus reaching the stomach in a perfectly dry state.

April 3d. Has great relief from the charcoal. Hepatic dullness in mammary line normal. There is still constant and at times violent pain in left hypochondrium. Urine has decreased, and is passed with some difficulty.

R̄ Ext. buchu fld. 3i. every four hours.

Urine is acid; specific gravity 1022; no albumen; no casts.

April 10th. Has remained about the same, but the pain the last two days has been less marked. He wishes to go to his home in Philadelphia, and is discharged, relieved.

WORCESTER CITY HOSPITAL.

MEDICAL CLINIC.

Three Cases of Eczema.—CASE I. A mechanic, aged thirty-seven. Two years ago had, for the first time, a severe attack of eczema, which appeared on the face, fore-arms, and legs, confining him to the house for six weeks. One year ago this was repeated, but he recovered in four weeks.

Ten weeks ago the disease again showed itself, but instead of being confined to the localities already mentioned it spread till nearly the whole of the cutaneous surface became involved. The condition of the patient now became pitiable in the extreme; the itching was intolerable, the exudation very profuse, saturating his clothing and even dropping from his hands; his suffering was so intense as to render him at times delirious.

He has been treated with Fowler's solution internally, and emollient and also astringent applications, with apparent benefit, which, however, has been only temporary, the disease, after seeming to be subdued, becoming suddenly and severely aggravated. The patient is much reduced in strength; bowels are constipated, but appetite continues good.

On admission to the hospital he had a warm bath, which gave him great relief. The bath was ordered to be repeated twice a day, medicated with two ounces of bicarbonate of soda, the affected surface to be then covered with carron oil; he was also ordered a Seidlitz powder every morning. After three days of this treatment he appeared to be very much better, but on the fourth day was as badly off as ever. The bath was then ordered for once a day only, the oil dressing continued, and five drops of Fowler's solution three times a day.

On the ninth day after admission the condition of the patient was but slightly improved. The baths and oil dressings were ordered to be discontinued and the following lotion to be used instead:—

R̄ Acidi hydrocyanici dil.	3 i.
Bismuthi subnitratiss	3 ij.
Aquæ	3 viij. M.

This seemed to produce immediate and very satisfactory effects; the itching was allayed almost instantly by the application, the exudation began to dry up and healthy skin to appear. The improvement of the patient was constant as long as he remained in the hospital, and in four weeks after his admission, or fourteen weeks from the time of the outbreak of the disease, he was discharged, very much relieved.

CASE II. A laborer, fifty years old, has chronic eczema, with which he has been troubled for the last three years; this affects various parts, irregularly, and has now become so bad as to disable him. The eruption is very itchy, the affected portions of skin much thickened, and the exudation and redness are slight. The patient is debilitated, but no other disease can be detected.

The case was treated by the application of Hebra's diachylon ointment; also a tepid bath with tar soap daily, and eight drops of Fowler's solution after each meal.

After three weeks of this treatment the patient was discharged, almost entirely well.

CASE III. A young woman, deformed, nervous, hysterical, was admitted with eczema rubrum affecting the whole surface of the left leg from the middle of the foot to the middle of the calf. The disease was of five months' duration, and various remedies had been tried without relief. The affected skin had a very high color, and was uniformly and moderately infiltrated; the exudation was not excessive. The patient complained bitterly of the eruption and of pain in the bone (tibia), particularly at the internal malleolus. She was very wakeful, her appetite was very capricious, and her bowels were obstinately constipated during the whole of her stay at the hospital.

She was ordered to keep in bed and to have the eruption well dusted with powdered starch, and to take a saline laxative every morning. This treatment was continued for a fortnight; at first it seemed to be beneficial, the eruption becoming drier, and healthy skin appearing at its edges; this condition, however, was but transient, and at the end of the fortnight the leg was not improved, except that the pain and swelling were, perhaps, not quite so marked as at first.

Diluted oil of cade was then applied to the whole of the affected surface; this application was very painful, but followed by some improvement for a day or two, after which it seemed to have no further effect, though it was continued for sixteen days. The leg grew no worse, and looked better at the end than at the beginning of the last period; the patient, however, still complained much of pain, and was very nervous and uncomfortable. It was now ordered to omit the oil of cade, to give compound rhubarb pills at night, and to apply the following ointment:—

R̄ Potass. bromid.	3 ss.
Unguenti	3 i. M.

This, in turn, was followed by some improvement, and the affected part looked better than at any previous period of the treatment, but after the second day of trial this failed to give satisfaction, and in a few days was discontinued. The patient had been in the hospital six weeks, the eruption was somewhat improved, though still severe, and apparently very obstinate. Resort was now had to the "chloral wash" extensively used in this hospital as a surgical dressing, and the affected surface was kept wet constantly with the solution (in the proportion of three grains of chloral to the ounce of water). After only three days' use of this dressing the eruption, the itching, and the cutaneous pain entirely disappeared, some redness of the skin only remaining.

CHARLES A. PEABODY, M. D.

COMPARATIVE MORTALITY OF PROVIDENCE AND ST. PAUL.

MESSRS. EDITORS, — An opportunity now presents itself of comparing the mortuary statistics of Providence, R. I., and St. Paul, Minn., for the coldest and warmest winter months known for years in the respective cities.

Dr. Snow, in his monthly report, says, "It is a popular idea that very mild weather is very unhealthy." He refutes this idea with the mortuary statistics for the months of January, 1875, and January, 1876.

January, 1875, was the coldest January known for years, while January, 1876, was the warmest for years. The death-rate was as follows for the two months: —

January, 1876.		January, 1875.	
Whole number of deaths	115	Whole number of deaths	159
Pneumonia	15	Pneumonia	35
Consumption	22	Consumption	31
Croup	5	Croup	10
Bronchitis	1	Bronchitis	6
Scarlatina	4	Scarlatina	19

February, 1875, in Minnesota, was perhaps the coldest month ever known in the United States, or at least of which we have account. The mercury was almost constantly below zero in St. Paul. February, 1876, was correspondingly mild.

The death-rate in St. Paul, for February, 1875, was the lowest for years for that month, while February, 1876, was of average mortality. The death-rate was as follows for the two months: —

February, 1875.		February, 1876.	
Whole number of deaths	20	Whole number of deaths	28
Consumption	3	Consumption	4
Croup	1	Croup	0
Inflammation of lungs	4	Inflammation of lungs	3
Convulsions	1	Convulsions	3

I never accept comparative mortuary statistics as correct except based upon the official census for the same year. Fortunately this year (1875) a census was taken in both cities, Providence and St. Paul.

Population of Providence, 1875	100,675
Population of St. Paul, 1875	33,067

The death-rate in Providence for the month of January, 1876, was 13.7 per 1000 of population; for January, 1875, was 18.9 per 1000 of population.

The death-rate in St. Paul for the month of February, 1876, was 10.1 per 1000 of population. February, 1875, 7.2 per 1000 of population.

I was led to make the above curious comparison of mortuary statistics because I believe that Dr. Snow's figures are as nearly correct as a conscientious statistician could make them. The mortuary record of St. Paul is correct because no one is buried without a permit from the health officer.

The question is now asked, Do you propose to controvert Dr. Snow's opinion? I reply, No, I merely wish to verify by figures a remark made to me by a physician, who, like myself, has dabbled much in medical and mortuary statistics. "You can prove anything you want to," said he, "by mortuary statistics." Experience has taught me that his remark was practically true.

BREWER MATTOCKS, M. D., *ex-Health Officer St. Paul.*

NORFOLK DISTRICT MEDICAL SOCIETY. — The annual meeting will be held at the Willard House, Hyde Park, on Tuesday, May 9th, at eleven o'clock. Election of officers. Address by Dr. P. O'Meara Edson. Papers will be read as follows: Dr. Henry A. Martin, Treatment of Fractures of the Fore-Arm; Dr. Robert T. Edes, Intracranial Syphilis; Report of Committee on "School Children and Infection." Dinner at 1.45 P. M.

ARTHUR H. NICHOLS, *Secretary.*

MESSRS. EDITORS, — I cut the inclosed from a New Hampshire country paper. The notices appear in sequence, and evidently belong in the same category.

"Nothing is so insidious as a cold or a cough. Poison does not make a swifter progress in the system. Use promptly the only sure antidote, Hale's Honey of Horehound and Tar.

"Pike's Toothache Drops cure in one minute.

"A. A. Hayes, M. D., State Assayer of Massachusetts, pronounces Hall's Sicilian Hair Renewer an efficient preparation for cleansing the skin of the head, promoting the growth, and restoring the original color of the hair when it has become gray."

The individual who prostitutes an honorable civic office to serve the interests of vendors of articles such as the above appears to be an honorary member of the Massachusetts Medical Society. Can no steps be taken to procure his expulsion? X.

Boston, April 22, 1876.

BOOKS AND PAMPHLETS RECEIVED. — Résumé of the Transactions of the International Medical Congress at Brussels, 1875. By Geo. W. Wells, M. D. (Reprinted from the St. Louis Medical and Surgical Journal.)

Warm and Hot Water in Surgery. By Frederick Hyde, M. D. (From the Buffalo Medical and Surgical Journal.) 1876.

Some Special Affections of the Oesophagus. By F. W. Godon, M. D. (Reprinted from the Pacific Medical and Surgical Journal.) San Francisco. 1876.

American Clinical Lectures. Vol. II. No. 3. The Treatment of Mild Cases of Melancholia at Home. By E. C. Seguin, M. D. New York: G. P. Putnam's Sons. 1876.

Transactions of the Thirtieth Annual Meeting of the Ohio State Medical Society, held at Put-In Bay. Cincinnati. 1875.

Sixty-Second Annual Report of the Trustees of the Massachusetts General Hospital. 1875.

Sur l'Avortement spontané dans les premiers Mois de la Grossesse. Par le Dr. A. Leblond. (Extrait des Annales de Gynécologie, No. d'Août, 1875.)

An Introduction to Pathology and Morbid Anatomy. By T. Henry Green, M. D., London. Second American from the Third Revised and Enlarged English Edition. Philadelphia: Henry C. Lea. 1876.